

WHAT IS CLAIMED IS:

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1. A method of controlling an identification level for an optical receiver wherein the optical receiver converts an optical signal from an optical fiber into an electric signal, uses a  
10 limiter amplifier to amplify the electric signal, and reproduces data, the method comprising steps of:

changing an identification level supplied to the limiter amplifier from a lower bound to an upper bound thereof and storing an average of an  
15 output of the limiter amplifier together with the identification level;

setting a first average of a minimal value of the average and a predefined value and a second  
average of a maximal value of the average and the  
20 predefined value, said predefined value being between the minimal value and the maximal value, and obtaining a first identification level corresponding to the first average and a second identification level corresponding to the second average; and

25 computing an optimal identification level based on the first identification level and the second identification level and supplying the optimal identification level to the limiter amplifier.

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2. The method as claimed in claim 1,  
35 wherein when the minimal value and the maximal value are set as 0% and 100%, respectively, the first average and the second average are set as about 25%

and about 75%, respectively.

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3. The method as claimed in claim 1,  
wherein the optimal identification level is set as a  
level of 30% through 40% in a level range between  
the first identification level and the second  
10 identification level.

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4. A method of controlling an  
identification level for an optical receiver wherein  
the optical receiver converts an optical signal from  
an optical fiber into an electric signal, uses a  
limiter amplifier to amplify the electric signal,  
20 and reproduces data, the method comprising steps of:  
changing an identification level supplied  
to a monitoring limiter amplifier from a lower bound  
to an upper bound thereof, said monitoring limiter  
amplifier configured to have a feature similar to  
25 the limiter amplifier and receiving the electric  
signal, and storing an average of an output of the  
monitoring limiter amplifier together with the  
identification level;

setting a first average of a minimal value  
30 of the average and a predefined value and a second  
average of a maximal value of the average and the  
predefined value, said predefined value being  
between the minimal value and the maximal value, and  
obtaining a first identification level corresponding  
35 to the first average and a second identification  
level corresponding to the second average; and  
computing an optimal identification level

based on the first identification level and the second identification level and supplying the optimal identification level to the limiter amplifier.

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5. The method as claimed in claim 4, wherein when the minimal value and the maximal value are set as 0% and 100%, respectively, the first average and the second average are set as about 25% and about 75%, respectively.

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6. The method as claimed in claim 4, wherein the optimal identification level is set as a level of 30% through 40% in a level range between the first identification level and the second identification level.

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7. An optical receiver for converting an optical signal from an optical fiber into an electric signal, using a limiter amplifier to amplify the electric signal, and reproducing data, comprising:

a change part changing an identification level supplied to the limiter amplifier from a lower bound to an upper bound thereof;

35 a storage part storing an average of an output of the limiter amplifier together with the identification level; and

a computation part setting a first average of a minimal value of the average and a predefined value and a second average of a maximal value of the average and the predefined value, said predefined  
5 value being between the minimal value and the maximal value, obtaining a first identification level corresponding to the first average and a second identification level corresponding to the second average, computing an optimal identification  
10 level based on the first identification level and the second identification level, and supplying the optimal identification level to the limiter amplifier.

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8. The optical receiver as claimed in claim 7, wherein when the minimal value and the  
20 maximal value are set as 0% and 100%, respectively, the first average and the second average are set as about 25% and about 75%, respectively.

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9. The optical receiver as claimed in claim 7, wherein the optimal identification level is set as a level of 30% through 40% in a level range  
30 between the first identification level and the second identification level.

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10. An optical receiver for converting an optical signal from an optical fiber into an

electric signal, using a limiter amplifier to amplify the electric signal, and reproducing data, comprising:

- 5       a monitoring limiter amplifier configured to have a feature similar to the limiter amplifier and receiving the electric signal;
- a change part changing an identification level supplied to the monitoring limiter amplifier from a lower bound to an upper bound thereof;
- 10       a storage part storing an average of an output of the monitoring limiter amplifier together with the identification level; and
- a computation part setting a first average of a minimal value of the average and a predefined value and a second average of a maximal value of the average and the predefined value, said predefined value being between the minimal value and the maximal value, obtaining a first identification level corresponding to the first average and a
- 15       second identification level corresponding to the second average, computing an optimal identification level based on the first identification level and the second identification level, and supplying the optimal identification level to the limiter
- 20       amplifier.
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- 30       11. The optical receiver as claimed in claim 10, wherein when the minimal value and the maximal value are set as 0% and 100%, respectively, the first average and the second average are set as about 25% and about 75%, respectively.

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12. The optical receiver as claimed in  
claim 10, wherein the optimal identification level  
is set as a level of 30% through 40% in a level  
5 range between the first identification level and the  
second identification level.